Subject: Science

Level: Standard 3

Strand: Individuals and Groups

Topic: Adaptations in plants and animals

Key Points

- Adaptation is usually a physical or behavioural change to better suit the environment.
- Adaptation enable plants and animals to be successful in a particular environment
- Adaptation allows the organism a better chance to survive in its surroundings.

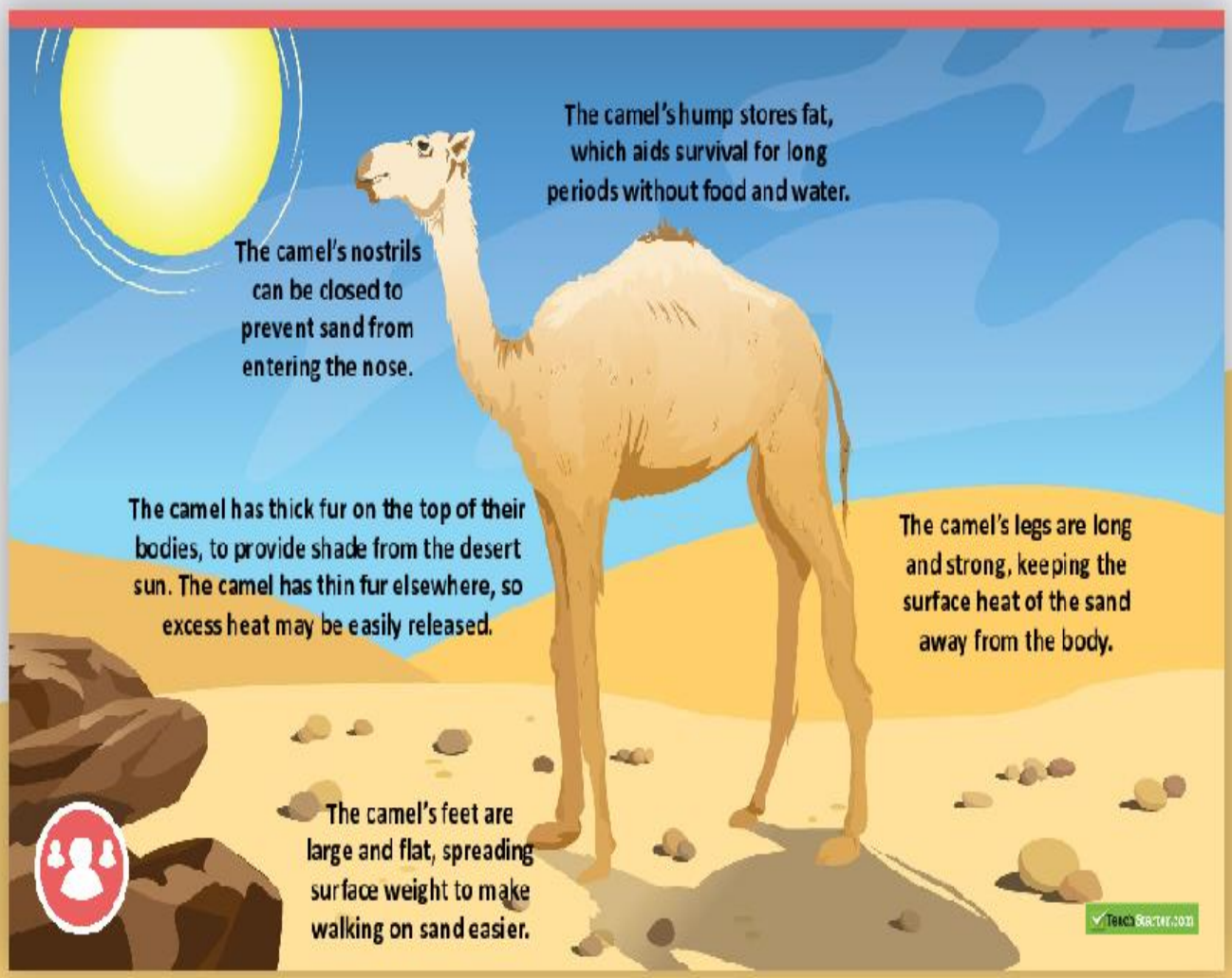
Some types of adaptations

Animals:

- Burrow into earth if there is little water: frog
- Change colors to match surroundings to hide from prey: lizards
- Increase thickness of fur to protect themselves from cold: sheep
- Shed hair or coat if it is too hot: dog
- Sleep through periods when food is scarce: bear

Plants:

- Waxy covering to keep water in: cactus
- Deep roots to get ground water in dry periods: mangrove
- Thick bark to survive fire: teak
- Colorful petals to attract insects for pollination eg hibiscus
- Poisons that cause itch eg poison ivy
- Strong odors to discourage insects: tomatoes


The camel's hump stores fat, which aids survival for long periods without food and water.
The camel's nostrils can be closed to prevent sand from entering the nose.
The camel has thick fur on the top of their bodies, to provide shade from the desert sun. The camel has thin fur elsewhere, so excess heat may be easily released.
The camel's legs are long and strong, keeping the surface heat of the sand away from the body.
The camel's feet are large and flat, spreading surface weight to make walking on sand easier.
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Complete the table to show adaptations of the camel

Structure	Adaptations
hump	
nostrils	
legs	
feet	

Answer key for Slide 4: adaptations of the camel

Structure	Adaptations
hump	Stores fat as a source of energy
nostrils	Can close to prevent sand from entering
legs	Long to keep heat away from the body
feet	Large and flat for walking in the sand

ASSESSMENT

Examine the pictures of the grasshopper and cactus. State two adaptation for each.





Answer Key –Slide 6

Picture	Adaptations
Grass hopper	Green colour of animal blends with leaf(camouflage). Strong legs for hopping Long antenna for sensing the environment
Cactus	Thick stems for storing water Leaves shaped like spines for protection from being eaten by animals. Thick waxy covering to help prevent the loss of water.

Acknowledgements

Picture	Reference
	Plant and animal adaptation PowerPoint (teachwire.net) https://www.teachstarter.com/au/teaching-resource/plant-and-animal-adaptations-powerpoint/
	Tettigonia viridissima - Wikipedia war.wikipedia.org (Copied from Google Images)
	Opuntia microdasys (Bunny Ears) gardenia.net (Copied from Google Images)